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1 Q And GTE California is just one of those
2 operations.

3 A That's correct.

4 Q You mentioned the GTE business unit. Could
5 you just tell us what you mean by that term?

6 A I think there's probably a technical
7 definition. I'll just tell you what I take them to
8 mean.

9 I take them to mean the individual
10 corporations under the GTE umbrella, sometimes treated
11 broadly.

12 So, for example, sometimes I'll speak of GTE
13 Telephone Operations even though it contains separate
14 corporations like GTE California or GTE Florida, or
15 Contel, whether it's been merged or not in some states,
16 as well as Mobilnet, GTE Corporate itself, and so on,
17 CODETEL.

18 Q And you understand, don't you, that GTE
19 California is a regulated public utility within the
20 State of California?

21 A That's correct.

22 Q And it is a subsidiary of the GTE Corporation
23 you mentioned a few moments ago?

24 A I don't know the exact definition of that.

25 Colloquially, I'd agree with you, but I don't
26 know if that's correct.

27 Q Now, one of your other roles for GTE Business
28 Units is to testify in regulatory proceedings?

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1 A I have had occasion to do that. I wouldn't
2 say it's necessarily one of my roles.

3 But when I contribute to a particular process,
4 I have, on occasion, been asked to testify if I provided
5 the majority of the work.

6 Q And have you testified for GTE California many
7 times before?

8 A Once before.

9 Q That was in the IRD proceeding.

10 A That was in the IRD proceeding.

11 Q Yesterday, under your direct examination,
12 Mr. Golabek asked you if Exhibit 37 had been prepared by
13 you or under your direction, and you answered "yes."

14 Do you recall that?

15 A 37 is my direct testimony?

16 Q That's correct.

17 A Yes, that's correct.

18 Q He never asked you whether Exhibit 38 had been
19 prepared by you or under your direction.

20 It was probably an oversight, but could you
21 tell us for that exhibit whether that is true?

22 A That's my reply testimony?

23 Q Yes.

24 A Yes, I did.

25 MR. GOLABEK: Thank you, Mr. Faber.

26 MR. FABER: Q Do you draw a distinction between
27 "prepared by you" or "under your direction" in
28 responding to that yes?

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1 A Do I personally? In this case? No.

2 Q Yes.

3 That is, did you prepare the testimony in
4 Exhibit 37 and Exhibit 38 yourself?

5 A Oh, yes, I did.

6 Q Now, who asked you to testify on behalf of
7 GTE California in this proceeding?

8 A I honestly don't know.

9 Q You just don't recall how it came about that
10 you got this assignment?

11 A Oh, I recall how it came about.

12 Q Could you tell us?

13 A I was here for something else. I was asked if
14 I could do something, and I thought I didn't have the
15 time, and necessity suggested that I probably did --

16 (Laughter)

17 THE WITNESS: -- and the next thing I knew I was
18 signed up to do this.

19 (Laughter)

20 ALJ REED: I know how that is.

21 (Laughter)

22 MR. FABER: Q What was the nature of what you were
23 asked to do?

24 A The question was a question of determining the
25 correct productivity factor, and the reason I got
26 brought into it and couldn't get out of it is it was a
27 short time line, and they said, you know, we've got to
28 do this fast, we've got to do this quickly. And so I

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1 said I would do what I could do, and that's what I did.

2 Q At the time that this project was assigned to
3 you, was Dr. Christensen's LEC TFP study specifically
4 mentioned to you by anyone at GTE California?

5 A No.

6 And, in fact, the way I found out that
7 Christensen was doing that, I was -- we were going over
8 who we could use for outside witnesses instead of me,
9 and I said they should try and get ahold of Christensen,
10 and I was told that that really can't be done.

11 Q What time period are we talking about?

12 When did these discussions first occur?

13 A I really couldn't tell you.

14 Q Was it in 1995?

15 A Oh, yeah. It was.

16 Q You said a short time frame?

17 A Yeah.

18 Q The testimony was filed in early September.

19 Was it a couple of months before that?

20 Was it a couple of weeks?

21 A If even that. If even that.

22 Q You were aware at the time that you were asked
23 to do this that Dr. Christensen had submitted a study of
24 LEC TFP to the FCC in May of 1994?

25 A I was aware of Christensen's work for USTA or
26 with USTA and with the FCC.

27 Q When you were assigned this project, did
28 anyone ask you to analyze whether the PUC should rely

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1 upon Dr. Christensen's study in this case?

2 A No. No.

3 Q That was your idea.

4 A Yes.

5 Q Now, you consider Dr. Christensen to be one of
6 the leading experts in the field of Total Factor
7 Productivity?

8 A Yes, I do.

9 Q Have you ever worked directly with him on a
10 productivity analysis?

11 A No.

12 Q But you have relied on his work before.

13 A Yes, I have.

14 Q Can you tell us when you've done that?

15 A Well, pretty much any time I look at a
16 production function or do a productivity analysis -- and
17 this was primarily back when I was doing labor economics
18 and transportation economics. You tend to use what's
19 called the translog production function, translog cost
20 function, and these were invented by Jorgensen,
21 Christensen, and Lao back in the late '60s, early '70s,
22 and pretty much revolutionized how we did production
23 theory and cost theory and, consequently, productivity
24 analysis.

25 And since that time I would say that the way
26 you start one of these analysis is you use one of the
27 Christensen forms and/or one of the Diewert forms, and
28 that's where you started the analysis, and then you

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1 continue from there. So, yes, I rely on his work quite
2 a bit.

3 Q Have you ever submitted testimony in a
4 regulatory proceeding where you supported the use of any
5 work of Dr. Christensen?

6 A No.

7 Q Have you ever disagreed in public, either in
8 writing or verbally, with any of his analyses of
9 productivity issues?

10 A No.

11 Q Have you ever testified that an analysis
12 performed by Dr. Christensen on productivity issues was
13 either flawed or inaccurate?

14 A No.

15 Q Have you ever testified that a productivity
16 analysis performed by Dr. Christensen was incomplete?

17 A No.

18 Q GTE California is subject to the FCC's
19 interstate price caps mechanism; is it not?

20 A I believe it is.

21 Q Did you participate at all in FCC Docket 94-1
22 that led up to the recent adoption of the three-part
23 productivity factor?

24 A No. I did not.

25 Q You're familiar with that docket, however, are
26 you?

27 A I'm familiar with some features of the
28 docket. Yes.

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1 Q In what context have you become familiar with
2 some features of that docket?

3 A There was a productivity study, in fact a
4 number of productivity studies submitted, and as matter
5 of course we just went through them to see if -- see
6 what was there.

7 Q One of those was Dr. Christensen's study; is
8 that right?

9 A I may have got it from that source, I may have
10 got it from another source, but, yes, generally
11 speaking.

12 Q Now, appended to the FCC's recent price cap --
13 well, let me back up for a second.

14 Have you had a chance to read the FCC Price
15 Cap decision that adopted the three-step productivity
16 factor?

17 A The whole thing?

18 Q Yes.

19 A No.

20 Q You are aware that there is an analysis by FCC
21 economists Bush and Uretsky appended to that decision;
22 correct?

23 A Yes, I am.

24 Q And you've read that analysis?

25 A I've read that analysis.

26 Q Having read that analysis, then, you're aware
27 that Bush and Uretsky did not agree with
28 Dr. Christensen's analysis of the TFP for the LEC

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1 industry?

2 A I believe they agreed with the TFP.

3 They had a disagreement about the relationship
4 between the input price series.

5 Q Well, Dr. Christensen certainly concluded that
6 there was no differential between input price growth for
7 the LEC industry and input price growth for the economy
8 as a whole; is that right?

9 A That's correct.

10 Q And Bush and Uretsky disagreed with that; is
11 that correct?

12 A They disagreed on that part, yes.

13 Q And the FCC's order adopted the position that
14 Bush and Uretsky advocated in their analysis; is that
15 right?

16 A I don't know.

17 I was under the impression they did not.

18 Q Your reply testimony, Exhibit 38 -- do you
19 have that in front of you?

20 A I will in a second.

21 Yes.

22 Q Is it correct to say that your reply testimony
23 is an effort to explain why Bush and Uretsky's analysis
24 of input prices is wrong?

25 A Yes.

26 I would also say it's an effort to explain why
27 Dr. Selwyn's wrong.

28 Q When you were preparing Exhibit 38 did you

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1 talk to Dr. Christensen about it?

2 A No, I did not.

3 Q Do you know if he reviewed a working draft of
4 it at any time before it was submitted?

5 A I don't know.

6 Given the time frame, I would doubt it.

7 Q You've met Dr. Christensen in person?

8 A Last Tuesday or whenever he was here, yes.

9 Q You had not met him before that day?

10 A No.

11 Q And you'd never spoken to him before that day?

12 A Never before.

13 Q Now, given that the Bush and Uretsky analysis
14 takes issue with the input price analysis of
15 Dr. Christensen, did it occur to you to call
16 Dr. Christensen and talk to him about Bush and Uretsky
17 before you wrote this reply testimony?

18 A No. I don't --

19 (Modem sounding)

20 THE WITNESS: Dang those pesky modems.

21 I'm sorry. I lost where we were.

22 MR. FABER: Q You said it didn't occur to you to
23 call him.

24 A No. No.

25 Q Do you think it would have been valuable to
26 you to have discussed with him his view of what Bush and
27 Uretsky had said?

28 A Not particularly.

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1 This anal- -- the analysis I did I believe
2 stands on its own, and, you know, Dr. Christensen
3 aside -- I mean he's a very fine, famous economist. I
4 stand by my analysis.

5 Q Did you speak with anyone representing
6 Pacific Bell regarding this reply testimony before it
7 was filed?

8 A I talked to one person concerning whether any
9 of the data had been updated, and because there had been
10 a question of updating, Christensen's stuff, and I
11 wondered if Bush and Uretsky had updated anything, and I
12 called around and somebody said somebody from Pac Bell
13 might know, but in fact nobody had any update, so that
14 was it.

15 Q That was --

16 A That's the only context we had.

17 Q Now, I've read through some of the Bush and
18 Uretsky analysis, and there's no mention of any of your
19 work in that report; is that right?

20 A Pardon me?

21 Q There's no mention of any of your work on
22 productivity issues in the Bush-Uretsky study, is
23 there?

24 A No.

25 Q Why did you feel that it was important for you
26 to challenge the Bush-Uretsky analysis in this
27 proceeding?

28 A Well, it seemed to me that the only issue

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1 between anybody was whether or not there was a
2 difference in the input price series, and I looked at
3 their analysis, and their analysis I believed to be
4 incomplete. It did not seem to me that they were using
5 the full array of tools that you could use, so I used
6 the more sophisticated approach that encompasses theirs
7 as well as others to see if in fact there was any
8 evidence that there was a difference between these
9 things, and I found that there isn't.

10 Q Let me ask you about one of those issues that
11 you raise. Turn to Exhibit 38, page 4, if you would.

12 A All right.

13 Q Do you have that in front of you, Dr. Duncan?

14 A Yes, I do.]

15 Q Do you see the discussion there about dummy
16 variable methodology?

17 A That's correct. I see that.

18 Q You say, on page 4, that in using dummy
19 variables, this is a quote,

20 "There must be a theoretical
21 reason for specifying the structural
22 break at the point where the dummy
23 variable is introduced or an
24 empirical reason arrived at by
25 examining a wholly independent set
26 of data."

27 Do you see that?

28 A That's correct.

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1 Q Now, is it your testimony that Bush and
2 Uretsky did not have either a theoretical or an
3 empirical reason for introducing a dummy variable for
4 divestiture at 1984?

5 A My reading of their analysis, and my own
6 analysis, would make me conclude that they did not.

7 Q You would agree, would you not, that the
8 important structural changes mandated by the
9 Modification of Final Judgment concerning the
10 divestiture of the Bell System did not occur until
11 January the 1st, 1984?

12 A The adjustment to the Modified Final Judgment
13 might have started a year before, might not have taken
14 place before the year after, could have -- I mean these
15 things take time.

16 There are announcement effects. I would be
17 really uncomfortable to say that this happened on that
18 date and that's where the dummy variable goes in, unless
19 there's some compelling reason to believe that some
20 structural change in the relationship between the input
21 series, the input price series, some compelling reason
22 to believe that there would have been a shift in that,
23 and I just didn't see any compelling reason to believe
24 that there would be a change in the input price series.

25 Q I appreciate that explanation, Dr. Duncan, but
26 my question was simply would you agree that the
27 structural change as mandated by the MFJ took place on
28 January the 1st, 1984?

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1 A The direct answer to that is no, I don't agree
2 with that.

3 Q What changes ordered by the MFJ did not occur
4 on January the 1st, 1984?

5 A As I said earlier, one can have announcement
6 effects. So if the markets believed that something was
7 going to happen and if they were clued into this, they
8 start adjusting long before, they can start adjusting
9 long before.

10 Or if they decide that in fact it's not going
11 to happen and they're not prepared, they might not
12 adjust until long afterwards.

13 So one can't say with any certainty that
14 because something happened on January 1st of a given
15 year that the effect all happens there and not after or
16 not before.

17 Q I apologize for not being clear.

18 A Okay.

19 Q I'm not asking you about an affect.

20 I'm asking you about the official changes to
21 the Bell System. That occurred on January the 1st,
22 1984, isn't that right?

23 A I would have to ask somebody from the Bell
24 System on that because I don't know.

25 Q Okay. Are you aware that prior to
26 January the 1st, 1984, if Bell Companies purchased their
27 inputs mostly internally within the Bell System?

28 A No, I am not aware of that.

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1 Q So similarly you're not aware that after
2 January the 1st, 1984 the Bell Companies purchased most
3 of their input from outside the Bell System?

4 A I'm not aware of that either.

5 Q Turn to page 8 for a moment of this reply
6 testimony.

7 You suggest on that page that one could run
8 alternative regressions, entering dummy variables at
9 different points in time, isn't that right?

10 A Well, the answer is yes, but let me explain
11 what I'm doing here.

12 What I'm doing here is showing that if you
13 start playing this dummy variable game, say I have a
14 good story for why the dummy variable can go there, that
15 clever people can come up with stories to put dummy
16 variables any way they want and explain, you know, say,
17 well, look, we've got this.

18 And so I went through a series here where I
19 said, look, let's tell a logical story, I'll give you
20 another result; now let me give you another story, get
21 another result; let me give you another story, get
22 another result.

23 You know, that's a bad use of statistics, and
24 when we teach students how to use statistics, we say
25 don't do it that way.

26 Yes, you can always find a dummy variable, put
27 it in a particular part in the series and say, look, I
28 found something different, look at the data, squint at

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1 it a bit, and say, well, if we drop this one off and we
2 don't do this, then we can get some other result.

3 That's a very bad methodology, and it's what's
4 given statisticians, unfortunately, somewhat of a bad
5 reputation, not because statisticians do that, but
6 because other people misuse this particular methodology,
7 and I would say this one is misused more than any one
8 else, put a dummy variable in and give what I call a
9 great variable argument.

10 So anything that isn't explained by the data
11 that's picked up by that dummy variable is -- it's
12 actually just a 1994 effect.

13 But we think it has something to do with
14 divestiture, so we'll say it's this effect, or we'll say
15 it's that effect. It's not a legitimate use of this
16 methodology.

17 And so my point in doing this was to show, you
18 can get many different stories. Okay.

19 The right way to do it is the way I did it in
20 my direct testimony, is to say what is the difference,
21 there isn't a difference.

22 Test the hypothesis. Test the hypothesis that
23 price difference is really 2.6 percent, and rejects it
24 out of hand. Test the hypothesis that the price
25 difference is zero, can't reject that.

26 I mean that's the right way to do it, to use
27 the methodology; start with a well-developed null and
28 not start with something that results from looking at

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1 the data and eye-balling the data.

2 Eye-balling is a technical term, sorry --

3 (Laughter)

4 THE WITNESS: -- from looking at the data and
5 deciding how to analyze it after you've looked at it,
6 particularly when you're asking questions like we want
7 to know, you know, was there a change here and look, and
8 you look, and you look, and you say, well, if I made
9 this transformation and I dropped their variable and I
10 did this other thing, then I can get a change.

11 You know, I think that's a wrong way to do
12 statistics. It makes it an advocacy sort of tool
13 rather than a tool to find truth.

14 MR. FABER: Q Are you finished?

15 A Yes.

16 Q You said clever people could put dummy
17 variables where they want.

18 Are you suggesting that Bush and Uretsky did
19 this to mislead the Federal Communications Commission?

20 A I don't say that they did it to mislead.

21 I know people who try to do very good
22 analyses, looked at the data, and slipped a dummy
23 variable in there and there. Then when you go and look
24 at it on review, you say, you know, how did you do this,
25 and they tell you, you're immediately sceptical, and the
26 reason you're sceptical, on a lot of these things people
27 will use that methodology.

28 One could argue why isn't that a legitimate

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1 methodology, why don't statisticians allow you to do
2 that.

3 In controlled experiments, people have done
4 this, okay, and then you go and you repeat the
5 experiment, and you find when you use this methodology,
6 when you put the dummy variable in by eye-balling the
7 data, and then say, aha, I found something, and then you
8 go and replicate it, sometime later you're going to get
9 burned.

10 Invariably, those are the results that don't
11 hold up. Those are the results that don't hold up.

12 Now, in economic data we're disadvantaged.
13 We can't go and replicate the economy.

14 Nonetheless, we believe that what we've
15 learned from looking at controlled experiments is that
16 when you play this dummy variable game, that if we were
17 to replicate the economy, okay, we would get burned
18 again.

19 We would find that was a statistical artifact
20 and it's not reproducible.

21 So I'm not saying that they invidiously did
22 this, but I am saying that they misused the methodology.

23 Q Do you know if GTE filed anything with the FCC
24 challenging the Bush-Uretsky analysis?

25 A No, I don't know if they did.

26 Q Do you think they should have?

27 A I don't know.

28 Q You mention on page 8 that instead of using a

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1 divestiture dummy at 1984, you could instead have
2 introduced a dummy starting at 1970 to mirror the
3 Carterfone decision and following it with five year
4 planning periods, isn't that right?

5 A Yes.

6 Q Do you consider the Carterfone decision and
7 subsequent five year planning periods to compare with
8 divestiture in terms of producing comprehensive
9 structural change in the LEC industry?

10 A No. I just did it to show in fact that when
11 you do that, you get significant dummies and, you know,
12 this is kind of something that's pulled out of the air
13 and it's meant to illustrate exactly my point.

14 You know, you could imagine Carterfone, you
15 could imagine five year planning periods; let's put that
16 in there and see if we get some significant results, and
17 lo and behold, we do.

18 So I'm not saying that we put any credence
19 on this. I'm saying I could do -- and I don't know how
20 to do this, but I could have broken this into three year
21 planning periods and pick something other than
22 Carterfone and put dummy variables in that and see if we
23 get some kind of pattern.

24 I determine that you will get some kind of
25 pattern.

26 Once you start that game, you just go down the
27 slippery-slope and you never get any truth.

28 Q Have you ever met Mr. Bush or Mr. Uretsky?

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1 A Never have.

2 MR. FABER: Your Honor, I'd like to have a couple
3 of documents marked as exhibits.

4 ALJ REED: Yes.

5 Will you identify this first document.

6 MR. FABER: Certainly, your Honor.

7 The first document is a letter from me to
8 Mr. Golabek dated September the 21st, 1995.

9 It is a set of data requests to GTE California
10 in this proceeding.

11 ALJ REED: It will be marked for identification as
12 Exhibit 39.

13 (Exhibit No. 39 was marked for
14 identification.)

15 MR. FABER: I'd also like to mark as an exhibit
16 another document, your Honor, consisting of GTEC's
17 response to this data request.

18 ALJ REED: It will be marked for identification as
19 Exhibit No. 40.

20 (Exhibit No. 40 was marked for
21 identification.)

22 ALJ REED: Thank you, Mr. Faber.

23 MR. FABER: Q Dr. Duncan, do you have in front of
24 you a copy of Exhibit 39?

25 A Exhibit 39 is which?

26 Q The letter from me to Mr. Golabek.

27 A Second set of the one you just handed me?

28 Q Yes.

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1 A Yes, I do.

2 Q Have you seen that before?

3 A Yes, I have.

4 Q And Exhibit 40, the GTE reply dated

5 September the 28th, 1995.

6 A Yes.

7 Q Have you seen that before?

8 A Yes.

9 Q In fact, is the information that's provided in
10 the response information that you provided to GTE
11 California?

12 A Yes, it is.

13 Q Now, turn, if you will, for a moment to page 6
14 of your direct testimony, Exhibit No. 37.

15 This page begins a discussion, does it not, of
16 this input price differential that we were discussing a
17 few moments ago?

18 A Yes.

19 Q And you assert here that if the prices of the
20 inputs used by LECs were increasing at a lower rate than
21 the general rate of inflation in the economy, that the
22 economy would adjust to reduce the gap.

23 Do you see that?

24 A Yes.

25 Q Now, this theoretical economy adjustment
26 mechanism that you refer to, it would apply to all
27 industries, isn't that right?

28 A Loosely speaking, yes.

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1 Q There's no reason to limit it to local
2 exchange companies, is there?

3 A I'm not -- not that I know. We'd have to talk
4 about the industry and see.

5 Q Is it fair to say that the applicability of
6 this economic theory of the market adjusting to narrow
7 the gap is ultimately an empirical question?

8 A That's very definitely the case, and indeed
9 that's the way I approached this.

10 Q Now, in the second set of information
11 requests, which are found in Exhibit 39, you were asked
12 to provide cites to economy authorities that would
13 support your assertions regarding this economy
14 adjustment mechanism, is that right?

15 A That's correct.

16 Q And these responses that we got in Exhibit 40
17 are the citations to economy authorities that you
18 provided, is that right?

19 A That's correct.

20 Q Now, just to be clear for the record,
21 Dr. Duncan, and let me explain for the record that the
22 reason I've included the requests as well as the
23 responses is because although GTEC listed parts of the
24 request in their response, they didn't include all of
25 them, and I'm going to ask some questions about several
26 of the requests that are not set forth in the GTEC
27 retyping of the question.

28 Do you understand what I'm talking about?

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1 A Well, let's try it and we'll find out.

2 Q I'm just telling you that because it might get
3 a little confusing, and if it does I want you to say
4 something.

5 A Okay.

6 Q The second set of information requests not
7 only asked you to provide cites to economic authorities
8 that supported your economy adjustment mechanism theory,
9 they also asked you to indicate for each of the
10 authorities cited in the response whether that authority
11 specifically addressed the effect of non-homogenous
12 inputs on the applicability of the theory.

13 A That's correct.

14 Q And similarly, they asked you to indicate for
15 each of the authorities whether the authority
16 specifically addressed the effect of differences in
17 capital labor intensities among industries on the
18 applicability of a theory, is that right?

19 A That's correct.

20 Q Now, according to the responses found on
21 Exhibit 40, and I'm now looking at the second page in
22 the next to last and second to last paragraph, you state
23 that the authorities do not specifically address the
24 issue of nonhomogenous inputs on the applicability of
25 the theory, is that right?

26 A That's correct.

27 Q And that you also state there that none of the
28 authorities specifically addressed the effect of

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1 differences in capital labor intensities among
2 industries, is that right?

3 A That's correct.

4 Q Would you agree that the term "homogeneous"
5 has a standard meaning in the economic literature?

6 A It's an adjective, so it depends on what you
7 apply it to.

8 Q Well, if we apply it to the non-homogenous
9 inputs, do you know what I'm referring to?

10 A I know what an homogeneous input is.

11 Q Would you define it for us.

12 A By definition an input is a -- I'll say a
13 measurable quantity used in production that's identical
14 for each unit.

15 Q So you would agree, would you not, that the
16 term "non-homogeneous" also has a standard meaning with
17 respect to inputs?

18 A I could not figure out what you were talking
19 about.

20 By definition, inputs are homogeneous. If
21 they're not homogeneous they're different inputs; and
22 I believe Dr. Schmalensee said the same thing.

23 Q One of the cites you provided on page 1 of
24 Exhibit 40 is to a Kelvin Lancaster's book, Introduction
25 To Modern Microeconomics; is that correct?

26 A That's correct.

27 Q On page 50 of that text, Mr. Lancaster defines
28 a perfect market.

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1 Now, let me read to you his definition of a
2 perfect market:

3 "A market consisting of a
4 sufficiently large number of buyers
5 and sellers, no one of which buys or
6 sells more than a very small
7 fraction of the total where the
8 commodity being traded is regarded
9 as homogeneous, where the only
10 criterion for a transaction is that
11 no better bargain is available
12 elsewhere; that is, no buyers have,
13 for example, a loyalty to any
14 particular seller, and where all
15 traders are aware of all offers
16 available, is characterized as a
17 perfect market."]

18 Do you agree with that definition?

19 A I'd have to see that and go through the
20 checklist. Was there anything in there about
21 certainty?

22 Q Well, would you like to look at it?

23 A Yes.

24 MR. FABER: Can I show this to the witness, your
25 Honor?

26 ALJ REED: Yes, you may.

27 (Document handed)

28 MR. GOLABEK: I just note for the record, even

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1 though counsel for the witness hasn't seen it, I believe
2 Mr. Faber is making an accurate representation.

3 ALJ REED: Thank you, Mr. Golabek.

4 THE WITNESS: Yeah, with the qualification that he
5 puts here that these are -- these are approximate
6 conditions, I'll buy this.

7 There are lots of different definitions. I
8 would have added the definition that there be perfect
9 certainty and a certain amount of experience among the
10 consumers in dealing with the particular products. And
11 I don't think the issue of whether there is a large
12 number of buyers, no one of which buys a huge amount, is
13 really relevant.

14 What's really required is that there be a
15 competitive fringe. But that's a working definition
16 that you'd use in a textbook so that the algebra didn't
17 get complex when you did the analysis later on.

18 MR. FABER: Q Does your understanding of
19 homogeneous inputs include an assumption that prices are
20 uniform for the input?

21 A In very simple cases, yes. In actuality, it
22 depends on a lot of things.

23 For example, we take as given that prices for
24 certain kinds of commodities will be the same. But if
25 you look over a geographic area, you usually have to add
26 a transportation cost to things. And that's going to be
27 reflected in the price.

28 So one could go and say, Wait a minute, the